

Amendments to the Specification

Please replace paragraph [0033] with the following amended paragraph:

[0033] The general objective of resolving operator torque intent and providing accurate and pleasing driveability in accordance therewith is performed in accordance with the present invention described hereafter in an exemplary embodiment in conjunction with FIGS. 4-6. With reference first to FIG. 4, control 100 receives throttle request signals, TH_req, and brake request signals, BR_req. Throttle and brake requests are provided as preprocessed, filtered and conditioned signals from throttle position and brake system pressure sensors, respectively. Preferably the request signals are scaled and available in a normalized range of 0 to 100 representing the percentage of a full request. For example, a completely depressed throttle pedal would result in a throttle request signal equivalent to 100, whereas an operator stepping completely off of the throttle pedal would result in a throttle request signal equivalent to 0. Brake request is similarly scaled whereas no service brake pedal application results in a brake request signal of 0 and heavy service brake pedal application results in a brake request signal of 100 in accordance with system calibrations. Throttle request signals are summed at node 101 whereat the request signal is subtracted from the full scale signal quantity, e.g. 100. The resultant signal is output on line 113 and ranges from 0 to 100; however, the scale is inverted with respect to the throttle request signal. The signal on line 113 is then converted to a fractional percentage by multiplying it by weighting factor 0.01 at node 103 and providing the output on line 115. Generally, the larger the throttle request signal at the input, the smaller the signal on line 115. Next, the signal on line 115 is multiplied by signal on line 121 at node 105. The signal on line 121 is a negative factor derived as a function of the brake request signal. Generally, larger brake request signals at the input results in larger negative signal on line 121. In providing the signal on line 121, the brake request signal is multiplied by a factor, K1 at node 109. K1 is a negative calibration constant and is preferably a value of substantially -0.01. Other calibration constant magnitudes may be provided, the effects of which are discussed herein below. The output from node 105 on line 117 is a negative number, and in the present example will be

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between 0 and -1.0. The signal on line 117 is summed at node 107 with a unity factor of 1. The output from node 107 is provided on line 119. The signal on line 119 is ~~next~~ next input to Min/Max block 111 to limit the signal in accordance with high and low setting, e.g. 0 and 1 in the present example. The output from Min/Max block 111 is the throttle phase out ratio, TPOR, between 0 and 1. In the present example, TPOR will be 0 when throttle request is 100 or brake request is 0. Otherwise, TPOR is between 0 and 1, generally effected larger with smaller throttle requests and smaller with larger brake requests in accordance with the exemplary control 100.

Please replace paragraph [0035] with the following amended paragraph:

[0035] Turning now to FIG. 6, an exemplary implementation of the TPOR determined in accordance with exemplary control 100 of FIG. 4 is illustrated. Generally, the objective of control 150 is to establish a desired output torque T_{o_des} , for use in control of the powertrain earlier described herein. Torque contributions in accordance with brake requests and throttle requests are exemplified in control 150 of FIG. 6. Brake and throttle torque contributions are summed at node 143 to provide resultant desired output torque, T_{o_des} . Additional torque contributions may be summed at node 143 in an equivalent fashion. For example, a power take-off torque term may be provided in similar fashion in accordance with an operator setting or request. Brake torque contribution is provided by brake torque signal, TQ_{br} , on line 137. It is provided, for example, by means of a look-up table 131. Exemplary table reference quantities are shown as the brake request signal, BR_{req} , already discussed earlier herein and the vehicle speed or output speed represented as No herein. Throttle torque contribution is provided by throttle torque signal, TQ_{th} , on line 141. TQ_{th} is provided by block 135 in accordance with throttle torque signal on line 139 and TPOR signal from control 100. Throttle torque signal on line 139 is provided, for example, by means of a look-up table 133. Exemplary table reference quantities are shown as the throttle request signal, TH_{req} , already discussed earlier herein and the vehicle speed or output speed represented as No herein. In the exemplary implementation with EVT, the

results from look-up table 133 can be negative in Drive range as would be the case where regenerative braking is ~~desireable~~ desirable.

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